

## **REMARKS**

### **Summary**

Claims 1-10, 17, 18 20-27 and 29-36 were pending. Claims 1-10 were rejected, Claims 9 and 10 were objected to, and Claims 17, 18, 20-27 and 29-36 were allowed in the present Office action. The Applicants have amended Claims 1, 2 8 and 9. No new matter has been added. The Applicants respectfully request reconsideration of the rejections.

### **Claim Objections**

The Examiner has objected to Claims 9 and 10 but indicated that the claims would be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112, second paragraph, and to include the all of the limitations of the base claim and any intervening claims. The rejections under 35 U.S.C. § 112, second paragraph, are addressed below, and the Applicants respectfully submit that amended Claim 8 is now allowable, and Claims 9 and 10 are allowable as claims dependent thereon.

### **Claim Rejections**

#### **35 U.S.C. § 112, second paragraph**

The Examiner has adopted a different interpretation of the aspect of the gate line described in Claims 1 and 8 than intended by the Applicants. Claims 1 and 8 have been amended to describe the subject matter in a manner that uses spatial terms that may be more consistent with the Examiner's understanding. The Applicants express their appreciation to the Examiner for the extensive discussion of the perceived linguistic difficulties.

#### **35 U.S.C. § 112, first paragraph**

The Applicants respectfully traverse the rejection of Claim 2 under 35 U.S.C. § 112, first paragraph. The subject matter of Claim 2 is fully supported, for example at paragraph [0053] of the specification. To the extent that the Examiner has found an apparent conflict between the wording of Claim 2 and that of Claim 1, it is respectfully submitted that such a conflict has been obviated by the amendment to Claim 1.

#### **35 U.S.C. § 102 (b)**

Claims 1 and 3-8 were rejected under 35 U.S.C. § 102 (b) as being anticipated by Lee (US2002/0163602; now US 6,833,882; "Lee"). The Applicants respectfully traverse the rejection on the basis that a *prima facie* case of anticipation has not been made out.

Amended Claim 1 recites, *inter alia*, a gate line arranged in one direction on the substrate and having an edge portion bent angularly and inwardly, and a data line overlapping some of the bent edge portion of the gate line.

The Examiner identifies the gate line [32] shown in Fig. 3 of Lee as having a portion "bent angularly and inwardly [on the bottom, the region not marked "S" in Fig. 3], wherein the predetermined bent portion has substantially straight segments, ... a data line overlapping some of the bent portion of the gate line".

The Applicants respectfully submit that the area "S" is taught to be a storage capacitor, and the gate line [32] is taught to be a terminal of the storage capacitor. (col. 7, lines 49-51). The shape of the gate line [32] or [32'] is similar to the data line [34] and comprises a strip of conductive material having edges parallel to each other. (See the portion of Fig. 3 at the right hand side for [32] and [32'] and at the top left hand side for [34]). The region designated "S" is functionally a capacitor, and appears to be formed in part by broadening the width of the structure of the gate line [32] so as to encompass a first contact hole [50a] and to overlay a substantial portion of the storage electrode [54] so as to form the capacitor "S". The edge of the conductive region lying above the storage electrode [54] and proximal to the crenellated portion thereof is an edge of the capacitor plate.

The edge of the capacitor plate is formed (starting from the right hand side) by extending the edge of the gate line [32] angularly and outwardly from the gate line for a distance; bending the edge so as to be parallel to an fictive extension of the corresponding gate line edge, and continuing the edge to the left so as to form the plate of the capacitor "S". Similarly, when the gate line on the left hand side of the capacitor "S" is considered, the edge of the gate line [32] is extended angularly and outwardly so as to intersect the edge of the capacitor plate. (In Fig. 3, this line is shown as making an obtuse angle with respect to the gate line, while the similar line on the other end of the plate is a right angle.) The Applicants respectfully submit that the terms "inwardly" and "outwardly" must be interpreted with respect to the same structure. As described in this traverse, the two lines are bent outwardly from a

lower edge of the gate line to form a larger structure that acts as a plate of the capacitor "S".

The data line [34] taught in Lee is seen to intersect the lower edge of the gate line [32] at right angles, and the gate line lower edge is straight as it passes across the data line [34]. The data line [34] therefore does not overlap a bent portion of the gate line [32] as asserted by the examiner.

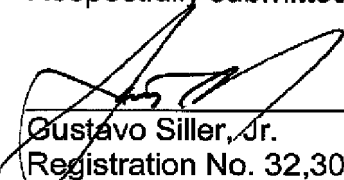
Therefore, the gate line structure taught by Lee does not have the "angularly and inwardly" bent edge, nor does the data line overlay a bent portion of the gate line, and not all of the elements and limitations of the present Claim 1, and the arrangement thereof, are taught. Claim 1 is therefore allowable. Claim 2 has been amended in a similar manner and is now allowable, both independently and as a claim dependent on an allowable claim. Claims 8 and 9 have been amended similarly to Claims 1 and 2 and are allowable for the same reasons.

## Conclusion

Claims 1-10, 17, 18, 20-27 and 29-36 are pending. In view of the amendments herein and for at least the reasons presented above, the Applicants respectfully request that the rejections and objections be withdrawn, and that a timely notice of allowance issue.

The Examiner is respectfully requested to contact the undersigned in the event that a telephone interview would expedite consideration of the application.

Respectfully submitted,



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